



**ENVIRONMENTAL ENGINEERING, INC**

6620 Owens Drive, Suite A • Pleasanton, CA 94588-3334

TEL (925)734-6400 • FAX(925)734-6401

**Technical Report:  
Treatment System Discharge Permit  
Central Contra Costa Sanitary District  
September 2005 through November 2005**

**Former Beacon Station  
2185 Solano Way  
Concord, California**

**December 29, 2005**

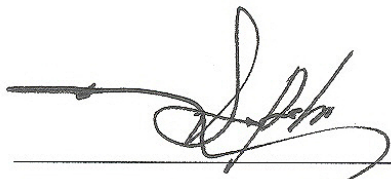
**Project 2463**

Prepared for  
**Mr. Marcus Shimoff  
Shimoff and Lager  
c/o Bert Horn  
405 Primrose Road, #300  
Burlingame, California**

Prepared by  
**SOMA Environmental Engineering, Inc.  
6620 Owens Drive, Suite A  
Pleasanton, California**

## Certification

This report has been prepared by SOMA Environmental Engineering, Inc. on behalf of Mr. Marcus Shimoff, the owner of the former Beacon Station located at 2185 Solano Way, Concord, California, to comply with the Central Contra Costa Sanitary District Groundwater Discharge Permit requirements for September 2005 through November 2005.



Mansour Sepehr, Ph.D., P.E.  
Principal Hydrogeologist



December 29, 2005

Mr. Timothy Potter  
Central Contra Costa Sanitary District  
5019 Imhoff Place  
Martinez, California 94553



**ENVIRONMENTAL ENGINEERING, INC**

6620 Owens Drive, Suite A • Pleasanton, CA 94588-3334  
TEL (925) 734-6400 • FAX (925) 734-6401

Re: CCCSD Class III Industrial User Permit  
Former Beacon Station  
2185 Solano Way, Concord, California

Dear Mr. Potter:

This report details the operation and maintenance that was performed on the groundwater remediation system at the above referenced site from September 2005 through November 2005. Included in this report are the laboratory analytical data from the groundwater samples that were collected from the treatment system. The site vicinity map is presented in Figure 1.

### **Site Background**

The remediation system initially began operating in October 2003. The treated groundwater was discharged under the requirements of Order 01-100, NPDES Permit No. CAG912002. On April 8, 2004, upon discovering the breakthrough of tert-Butyl-Alcohol (TBA) into the system's effluent, the system was shutdown and the Regional Water Quality Control Board (RWQCB) was notified. Due to the difficulty of removing TBA from the groundwater, and based upon the approval of the RWQCB, the treated groundwater was no longer discharged into the storm drain. On June 1, 2004, SOMA obtained approval from the Central Contra Costa (CCC) Sanitary District to begin discharging the treated groundwater into the on-site sewer main. A copy of the permit is attached as Appendix A.

At the request of the RWQCB, in a letter dated September 2, 2004, SOMA prepared a revised remedial corrective action plan (CAP). The objective of this report was to re-evaluate the previous CAP. Based on the current CCC Sanitary District's discharge requirements, neither Methyl tertiary Butyl Ether (MtBE) nor TBA needs to be removed from the treated groundwater prior to discharge into the sewer main. Therefore, based on economic considerations, as well as maintaining an effective remedial clean-up of the impacted groundwater at the site, SOMA recommended removing the vacuum air stripper and continuing site clean-up efforts using only activated carbon.

On November 4, 2004, the RWQCB approved SOMA's revised CAP. The conversion between the air stripper and GAC systems became retroactive on January 1, 2005.

On May 18, 2005, SOMA replaced the downhole electrical pump in the eastern French drain riser. At this same time, an electrical pump was also installed in the western French drain riser. Therefore, currently there are three active on-site remedial pumps

and one active off-site remedial pump. The locations of the groundwater extraction wells and treatment system are shown in Figure 2. A schematic diagram of the groundwater treatment system is illustrated in Figure 3.

### **Treatment System Operation**

Approximately 1,377,054 gallons of groundwater has been treated and discharged at the site (as of November 21, 2005). Approximately 93,440 gallons of treated groundwater was discharged into the site's sewer main (from August 31, 2005 to November 21, 2005).

To determine if the treated discharged groundwater from the treatment system to the site sewer main remains below the discharge permit limits, samples are routinely collected from the system effluent. The laboratory-reported effluent concentrations are shown in Table 1. Treatment system influent samples have been collected to evaluate the mass removal rate of impacted groundwater by the remedial system. The tabulated influent concentrations, as well as the mass removal rates, are shown in Table 2.

A completed Periodic Compliance Report (PCR) is presented in Appendix B. This report states that SOMA has remained in compliance with the requirements as established by the CCC Sanitary District. The laboratory analytical results are presented in Appendix C.

SOMA has routinely conducted operation and maintenance procedures to comply with the permit's conditions. The dates the system was checked during the time period from August 2005 through November 2005, as well as all equipment readings taken during the maintenance periods, are presented in Appendix D.

### **Future Treatment System Events**

As per the discharge permit's requirements, SOMA will routinely sample both the influent and effluent of the treatment system. Furthermore, the current Slug Discharge Prevention and Contingency (SDPC) Plan for the site will be updated by July 31, 2006.

If you have any questions or comments, please do not hesitate to call Tony Perini, Senior Project Engineer, or myself at (925) 734-6400.

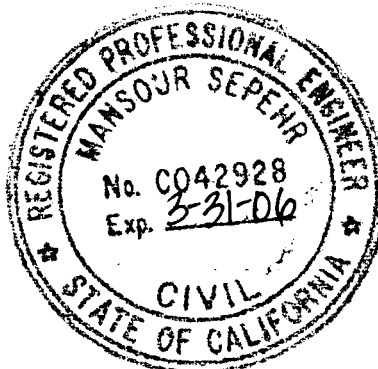
Sincerely,



Mansour Sepehr, Ph.D., P.E.  
Principal Hydrogeologist

Enclosures

cc: Mr. Bert Horn



# Tables

**Table 1**  
**Total Volume of Treated Water, Historical Operational Data, and**  
**Historical Effluent Chemical Analytical Results**  
**2185 Solano Way, Concord**

Date	Volume (gallons)	TPH-g (ug/L)	MtBE <sup>1</sup> (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)
<b>2003</b>							
27-Oct-03	190	<50	<2.0	<0.5	<0.5	<0.5	<0.5
31-Oct-03	1,860	<50	<2.0	<0.5	<0.5	<0.5	<0.5
14-Nov-03	4,700	<50	<2.0	<0.5	<0.5	<0.5	<0.5
17-Nov-03	13,540	<50	<0.5	<0.5	<0.5	<0.5	<0.5
<b>2004</b>							
6-Jan-04	18,500	<50	<2.0	<0.5	<0.5	<0.5	<0.5
7-Jan-04	25,500	<50	<2.0	<0.5	<0.5	<0.5	<0.5
13-Jan-04	51,000	<50	<2.0	<0.5	<0.5	<0.5	<0.5
*19-Jan-04	75,560	<50	<2.0	<0.5	<0.5	<0.5	<0.5
*21-Jan-04	83,210	<50	<2.0	<0.5	<0.5	<0.5	<0.5
28-Jan-04	106,510	<50	<2.0	<0.5	<0.5	<0.5	<0.5
3-Feb-04	127,010	<50	<2.0	<0.5	<0.5	<0.5	<0.5
10-Feb-04	151,300	<50	<2.0	<0.5	<0.5	<0.5	<0.5
19-Feb-04	184,720	carbon change-out 2000 lb vessel, 2 55-gallon polishing vessels					<0.5
25-Feb-04	203,620	<50	<2.0	<0.5	<0.5	<0.5	<0.5
*2-Mar-04	233,840	<50	<2.0	<0.5	<0.5	<0.5	<0.5
9-Mar-04	252,800	<50	<2.0	<0.5	<0.5	<0.5	<0.5
18-Mar-04	261,300	<50	<2.0	<0.5	<0.5	<0.5	<0.5
23-Mar-04	276,430	<50	<2.0	<0.5	<0.5	<0.5	<0.5
31-Mar-04	280,222	<50	<2.0	<0.5	<0.5	<0.5	<0.5

**Table 1**  
**Total Volume of Treated Water, Historical Operational Data, and**  
**Historical Effluent Chemical Analytical Results**  
**2185 Solano Way, Concord**

Date	Volume (gallons)	TPH-g (ug/L)	MtBE <sup>1</sup> (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)
<b>2004</b>							
5-Apr-04	298,210	<50	<2.0	<0.5	<0.5	<0.5	<0.5
15-Apr-04	328,040	<50	<2.0	<0.5	<0.5	<0.5	<0.5
16-Apr-04	329,020	system shut-down due to TBA detected in effluent sample, discharge permit changed from NPDES to CCC Sanitary District discharge permit					
17-May-04	329,020	flow meter switched to a digital instantaneous meter (GPI 09 Computer Electronics)					
8-Jun-04	329,020	LEL meter Safe T Net 100 installed on system					
10-Jun-04	329,020	Meeting w/ CCC Sanitary District to show District install of flow meter and LEL meter					
14-Jun-04	329,170	Calibration of flow meter by Aqua Sierra, start-up of system, initial discharge to CCC Sanitary District					
14-Jun-04	329,320	<50	NA	<0.5	<0.5	<0.5	<0.5
6-Jul-04	355,053	<50	NA	<0.5	<0.5	<0.5	<0.5
4-Aug-04	371,123	<50	NA	<0.5	<0.5	<0.5	<0.5
10-Sep-04	414,343	<50	<2.0	<0.5	<0.5	<0.5	<0.5
8-Oct-04	463,370	<50	<2.0	<0.5	<0.5	<0.5	<0.5
12-Nov-04	549,217	<50	10.8	<0.5	<0.5	<0.5	<1.0
10-Dec-04	620,760	<50	<0.5	<0.5	<0.5	<0.5	<1.0
<b>2005</b>							
7-Jan-05	710,180	<50	94	<0.5	<0.5	<0.5	<0.5
11-Jan-05	722,070	carbon change-out 2000 lb vessel, 2 55-gallon polishing vessels					
3-Feb-05	778,030	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02-Mar-05	886,800	<4300	<10.8	<10.8	<10.8	<10.8	<21.5
15-Apr-05	985,100	<200	4.34	<0.5	<0.5	<0.5	<1.0
25-Apr-05	1,015,920	carbon change-out 2000 lb vessel, 2 55-gallon polishing vessels					
02-May-05	1,029,276	<200	<0.5	<0.5	<0.5	<0.5	<1.0
18-May-05	1,062,920	installed electrical pump in F.D. West and replaced electrical pump in F.D. East					
10-Jun-05	1,096,570	<200	1.24	<0.5	<2.0	<0.5	<1.0
21-Jun-05	1,126,470	Calibration of flow meter by Aqua Sierra					
31-Aug-05	1,283,614	carbon change-out, replaced 2 55-gallon polishing vessels, removed existing 2000 lb carbon vessel, and replaced with newer 2000 lb carbon vessel					
09-Sep-05	1,292,124	<50	<2.0	<0.5	<0.5	<0.5	<0.5

Notes:

NA- Not analyzed, based on the Sanitary District requirements for MtBE.

< = not detected above laboratory reporting limits.

1: MtBE Confirmed by EPA Method 8260B.

\* Only effluent sample collected on Jan. 19, Jan. 21, and March 2, 2004

**Table 2**  
**Cumulative Mass of Petroleum Hydrocarbons Removed from Groundwater Since**  
**Installation of Treatment System**  
**2185 Solano Way, Concord**

Date	Volume (gallons)	Influent Concentration (µg/L)			Mass Removed (pounds)		
		TPH-g	MtBE *	Benzene	TPH-g	MtBE	Benzene
2003							
27-Oct-03	190	1,000	40,000	150	0.002	0.06	0.0002
31-Oct-03	1,860	2,600	15,000	530	0.04	0.27	0.01
14-Nov-03	4,700	300	26,000	62	0.04	0.89	0.01
17-Nov-03	13,540	<1,300	22,000	140	0.04	2.51	0.02
2004							
6-Jan-04	18,500	10,000	15,000	540	0.46	3.13	0.04
7-Jan-04	25,500	20,000	24,000	1,400	1.62	4.53	0.12
13-Jan-04	51,000	50,000 Y	22,000	750	12.24	9.20	0.28
28-Jan-04	106,510	7,100	16,000	530	15.52	16.59	0.53
3-Feb-04	127,010	11,000	6,200	870	17.40	17.65	0.68
10-Feb-04	151,300	8,300	35,000	130	19.08	24.73	0.70
25-Feb-04	203,620	27,000	5,400	940	30.84	27.08	1.11
9-Mar-04	252,800	12,000	20,000	730	35.75	35.27	1.41
18-Mar-04	261,300	3,700	37,000	690	36.01	37.89	1.46
23-Mar-04	276,430	<2500	36,000	<25	36.01	42.42	1.46
31-Mar-04	280,222	<2500	35,000	170	36.01	43.53	1.47

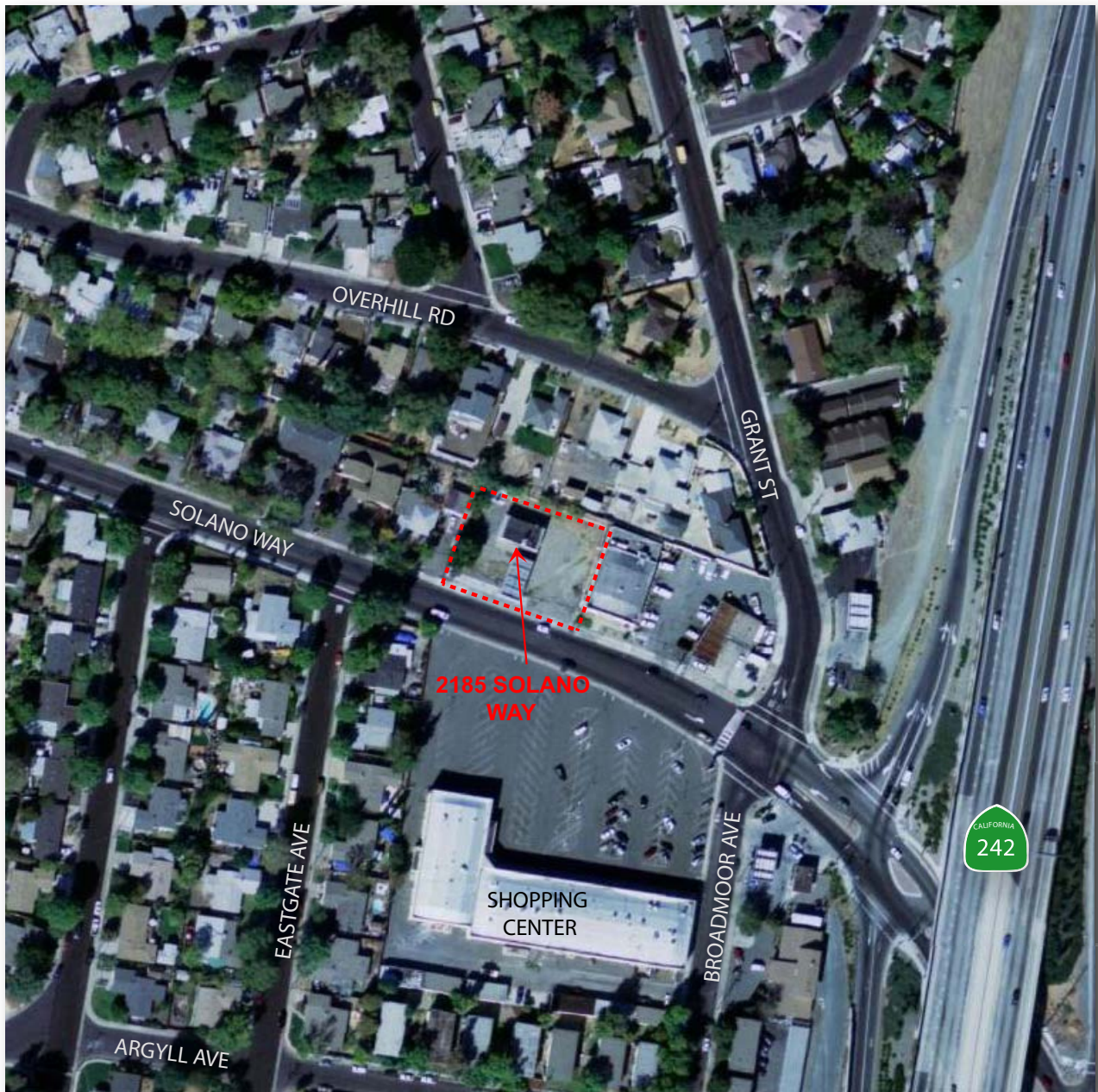


**Table 2**  
**Cumulative Mass of Petroleum Hydrocarbons Removed from Groundwater Since**  
**Installation of Treatment System**  
**2185 Solano Way, Concord**

Date	Volume (gallons)	Influent Concentration (ug/L)			Mass Removed (pounds)		
		TPH-g	MtBE *	Benzene	TPH-g	MtBE	Benzene
2004							
5-Apr-04	298,210	2,900	36,000	310	36.45	48.92	1.51
15-Apr-04	328,040	4,300	21,000	670	37.52	54.14	1.68
14-Jun-04	329,170	2,700	NA	470	37.54	NA	1.68
6-Jul-04	355,053	3,500	NA	610	38.30	NA	1.81
4-Aug-04	371,123	3,500	NA	430	38.76	NA	1.87
10-Sep-04	414,343	3,200	11,000	150	39.92	58.09	1.93
8-Oct-04	463,370	4,600	5,100	150	41.79	60.18	1.99
12-Nov-04	549,217	5,633	7,525	339.7	45.82	65.55	2.23
10-Dec-04	620,760	205	416	<4.3	45.94	65.80	2.23
2005							
7-Jan-05	710,180	9,800	6,200	520	53.24	70.42	2.62
3-Feb-05	778,030	4,200	4,700	70	55.61	73.07	2.66
2-Mar-05	886,800	14,300	1,300	516	68.56	74.25	3.12
15-Apr-05	985,100	<4200	3,630	15	68.56	77.22	3.14
02-May-05	1,029,276	5,510	1640	158	70.59	77.83	3.19
10-Jun-05	1,096,570	6,060	1,480	244	73.98	78.65	3.33
9-Sep-05	1,292,124	16,000	370	350	100.03	79.26	3.90

Notes:  
 NA- Not analyzed, based on the Sanitary District requirements for MtBE.  
 < = not detected above laboratory reporting limits.  
 \*: MtBE Confirmed by EPA Method 8260B.  
 Volume is shown as total system discharge. SOMA began discharging treated groundwater to the Central Contra Costa Sanitary District after 329,020 gallons of total flow through system.

# Figures



approximate scale in feet  
0 150 300

Figure 1: Site vicinity map.

# **Appendix A**

## **Central Contra Costa Sanitary District Class III Industrial User Permit**

**CENTRAL CONTRA COSTA SANITARY DISTRICT**  
**Class III Industrial User Permit**

Industrial User Name: <u>Shimoff &amp; LAGER, c/o Bert Horn (former Beacon Station)</u>		
Site Address: <u>2185 Solano Way, Concord, California 94519</u>		
Mailing Address: <u>2680 Bishop Drive, Suite 203, San Ramon, CA 94583</u>		
Permit Issued: June 1, 2005	Permit Fee through May 31, 2006	\$ 351.00 to be billed
Permit Renewal: May 31, 2007	Permit Fee through May 31, 2007	

**Certification**

- The Industrial User agrees to comply with Title 10 of the District Code and the terms and conditions of this permit.
- The Industrial User understands that this permit may be revoked and permission to discharge may be denied.
- The Industrial User shall be liable for all damages, direct and consequential, caused by violating the terms and conditions of this permit.

"I am an authorized representative of the Industrial User as specified in CCCSD Code Title 10.04.020 (B). I have authority to commit resources necessary to achieve and maintain compliance with the conditions of this permit. I have reviewed this permit document and understand the requirements contained herein."

**Company Officer:**

Name: Mansour Sepehr  
Title: President  
Signature: [Signature]  
Date: 5-3-05

**Definition of Authorized Representative of Industrial User:** An authorized representative of an industrial user may be: (1) the principal executive officer, if the industrial user is a corporation; (2) general partner or proprietor if the industrial user is a partnership or proprietorship, respectively; (3) duly authorized representative of the individual designated above if such representative is responsible for the overall operation of the facilities from which the discharge originates and if such representative is identified in writing by the individual designated in (1) or (2) above.

**Authorization**

The Industrial User is authorized to discharge wastewater to the sanitary sewer, subject to the Industrial User's compliance with Title 10 of the District Code, 40CFR, and the terms and conditions of this permit. This authorization is conditional on the Industrial User signing and returning the above certification to the District's Source Control Section.

**Central Contra Costa Sanitary District**

Name: Timothy L. Potter  
Title: Source Control Program Superintendent  
Signature: [Signature]  
Date: 4/28/05

# **Appendix B**

## **Central Contra Costa Sanitary District Periodic Compliance Report (PCR)**



# PERIODIC COMPLIANCE REPORT (PCR)

Central Contra Costa Sanitary District • Source Control Section  
5019 Imhoff Place Martinez California 94553-4392 • (925) 229-7288

**Industrial Users:** Completion of the Periodic Compliance Report (PCR) is required by the Industrial User Permit issued to your facility. Refer to the Appendix of your permit for reporting requirements. When completing this PCR, please address every section below, check all the boxes that apply, and submit all information as required. Record only the information for the reporting period as specified in your permit. Failure to accurately complete this report may result in citation by the District.

## INDUSTRIAL USER INFORMATION:

Facility Name:	Shimoff & LAGER, c/o Bert Horn (former Beacon Station)
Site Address:	2185 Solano WAY, CONCORD, CA 94519
Person completing report: (Name, title, company, phone)	CLIFFORD PERINI SENIOR PROJECT ENGINEER SOMA ENVIRONMENTAL ENGINEERING (925) 734-6400
Reporting Period:	September 1, 2005 to November 30, 2005

### A. COMPLIANCE SCHEDULE

- ☐ All Compliance Schedule items have been completed as required and documentation has been submitted.
- ☒ Attached is a status report of Compliance Schedule items not completed as of the date of this PCR.
- ☐ There are no Compliance Schedule requirements in the Appendix of the permit.

### B. SPECIAL APPROVALS & CONDITIONS

- ☒ I hereby certify that the facility and operations are in compliance with the Special Approvals and Conditions in the Appendix of the permit.
- ☐ There are no Special Approvals and Conditions requirements in the Appendix of the permit.

### C. CERTIFICATION, REGISTRATION & LICENSES

- ☐ A list of certified pretreatment operators is attached as required.
- ☐ A copy of the required licenses or registrations is attached.
- ☒ There are no Certification, Registration & Licenses requirements in the Appendix of the permit.

### D. OPERATION & MAINTENANCE (O&M) LOG REQUIREMENTS

- ☒ O&M Logs are maintained on-site as required.
- ☒ Copies of O&M Logs are attached as required.
- ☐ Submittal of O&M Logs is not required.

### E. OTHER REPORTING REQUIREMENTS

#### Manifests/receipts:

- ☒ No process liquids, sludges or solids, or hazardous wastes were off-hauled or recycled during the reporting period.
- ☐ Copies of the manifests/receipts for off-haul of process liquids, sludges or solids, or hazardous wastes are attached as required.
- ☐ Records are maintained on-site; submittal is not required.

#### Production data for the dates of sampling:

- ☐ Production data is attached as required.
- ☒ Submittal of production data is not required.

#### Flow monitoring data for the dates of sampling:

- ☐ Process discharge flow meter totalizer readings as required:  
Start \_\_\_\_\_ End \_\_\_\_\_
- ☒ Process water meter totalizer readings as required:  
Start 8/31/05 954,591 gallons End 11/21/05 1,048,034 gallons
- ☐ Flow meter readings not required.

### For Source Control use only

Date Received:

Reviewed by:

Date Reviewed:

## F. COMPLIANCE SAMPLING AND MONITORING

Compliance Sampling Information: (for multiple days of sampling attach an additional sheet)

- ☐ Compliance sampling is not required
- ☒ The original analysis reports and chain of custody are attached. The report includes: laboratory name, address and telephone number; reporting limits; units; QA/QC data; and the date and time of all grab samples.

Sampling performed by: <i>Mehran Nowroozi</i> (name, company, phone no) <i>SOMA ENVIRONMENTAL ENGINEERING, INC</i> <i>6620 OWENS DRIVE, Suite A, Pleasanton, CA 94588</i> (925-734-6400)	
Sampling locations & wastestreams sampled: <i>INFLUENT</i> <i>EFFLUENT</i>	
Sampling start date/time: <i>9/9/05 11 AM</i>	Sampling end date/time: <i>9/9/05 11:05 AM</i>

### Monitoring Information:

- pH recorder tape/chart: ☐ attached as required ☐ maintained on site ☐ pH monitoring not required
  - Flow recorder tape/chart: ☐ attached as required ☐ maintained on site ☐ flow monitoring not required
- totalizer reading*

### Compliance Status:

- ☒ All analytical and/or monitoring results are within applicable local / federal limits.
- ☐ Analytical and/or monitoring results indicate violation(s) of applicable federal or local limits. A separate sheet is attached listing the violations, the reasons for the violations, and a description of corrective actions taken.

**Total Toxic Organics (TTO) Certification** (Only for Industrial Users certifying in lieu of monitoring for TTO. Approved TTO Management Plan required.)  
Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation and/or pretreatment standard for Total Toxic Organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the public sewer system has occurred since the filing of the last compliance report. I further certify that this facility is implementing the TTO Management Plan submitted to, and approved by, the Central Contra Costa Sanitary District.

Signature

Title & Company

Date

### CERTIFICATION

All required sampling reported herein was conducted in accordance with the methods specified in the Industrial User permit for this facility. Samples were analyzed by a laboratory certified by the State of California for wastewater analysis by the methods reported. All analytical results obtained during the reporting period by EPA-approved methods, including those not required in the Industrial User permit, are included with this report. Production levels and process flows for the reporting period were typical for this facility. I have already reported to the District any changes (permanent or temporary) to the premises, processes, chemical usage, wastewater treatment, and/or operations that have the potential for changing the quality, volume, or location of the wastewater discharge of that may otherwise lead to deviation from the terms and conditions of the CCCSD Industrial User Permit. Any deviations from the above are explained on an attached sheet.

I certify under penalty of perjury that this document and all attachments were prepared under my direction or supervision and in accordance with the system designed to insure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) who manages the system, or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and/or imprisonment for knowing violations.

*Clifford Reini*

Signature

*Senior Project Engineer*  
*SOMA ENVIRONMENTAL ENGINEERING*

Title & Company

*12/27/05*

Date



# **Appendix C**

## **Laboratory Report and Chain of Custody Form for the Groundwater Remediation System**



Sequoia  
Analytical

819 Striker Ave Ste 8  
Sacramento, CA 95834  
(916) 921-9600  
FAX (916) 921-0100  
[www.sequoialabs.com](http://www.sequoialabs.com)

27 September, 2005

Tony Perini  
Soma Environmental Eng.  
6620 Owens Drive, Suite A  
Pleasanton, CA. 94588

RE: N/A  
Work Order: S509179

Enclosed are the results of analyses for samples received by the laboratory on 09/09/05 11:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tami Lindsay  
Project Manager

CA ELAP Certificate #1624



# SEQUOIA ANALYTICAL CHAIN OF CUSTODY

- ☐ 885 Jarvis Drive • Morgan Hill, CA 95037 • (408) 776-9600 • FAX (408) 782-6308  
☐ 1455 N. McDowell Blvd, Suite D • Petaluma, CA 94954 • (707) 792-1865 • FAX (707) 792-0342  
☐ 819 Striker Ave., Suite B • Sacramento, CA 95834 • (916) 921-9600 • FAX (916) 921-0100  
☒ 2430 Sprig Court, Suite G • Concord, CA 94520 • (925) 356-3150 • FAX (925) 356-0109

Company Name: SOMA ENVIRONMENTAL  
Mailing Address: 6620 Owens Drive, Suite A  
City: Pleasanton State: CA Zip Code: 94588  
Telephone: 925-734-6400 Fax #: 925-734-6401  
Report To: Tony Pereira E-mail Address: \_\_\_\_\_  
Sampler: NEW Project: 2463 - Solano WY, Concord  
Billing Address (if different): \_\_\_\_\_  
P.O. #: \_\_\_\_\_

Turnaround Time: ☒ 10-15 Working Days (Standard TAT) ☐ 7 Working Days ☐ 5 Working Days  
QC Data: ☐ Level II (standard) ☐ Level III ☐ Level IV  
Sequoia's Work Order # \_\_\_\_\_

MANDATORY:  
☐ SDWA (Drinking Water)  
☐ CWA (Waste Water)  
☐ RCRA (Hazardous Waste)  
☐ Other \_\_\_\_\_

Client Sample I.D.	Date / Time Sampled	Matrix Desc.	# of Cont.	Container Type	Sequoia's Sample #	ANALYSES REQUESTED (Please provide method)	Comments/Temp. (if required)
1. Effluent	9/9/05 11:05 AM		3	40-ml Vial		TPH 8015 BTEX 602 PH 8015	
2. Influent	9/9/05 11:05 AM		3	40-ml Vial			
3.							
4. Effluent	9/9/05 11:00 AM		1	1 Liter Amber			MPR
5. Influent	9/9/05 11:05 AM		1	1 Liter Amber			MPR
6.							
7.							
8.							
9.							
10.							

Relinquished by / Co.: D. Wilson Received by / Co.: Ami Anderson Date / Time / Temp.: 9/9/05 1145  
Relinquished by / Co.: \_\_\_\_\_ Received by / Co.: \_\_\_\_\_ Date / Time / Temp.: \_\_\_\_\_  
Relinquished by / Co.: \_\_\_\_\_ Received by / Co.: \_\_\_\_\_ Date / Time / Temp.: \_\_\_\_\_  
Relinquished by / Co.: \_\_\_\_\_ Received by / Co.: \_\_\_\_\_ Date / Time / Temp.: \_\_\_\_\_

Were Samples Received in Good Condition? ☐ Yes ☐ No Samples on Ice? ☐ Yes ☐ No Method of Shipment: \_\_\_\_\_  
White: Sequoia Yellow: Sequoia Pink: Client



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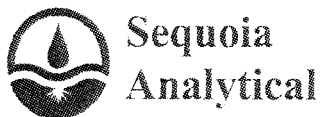
Soma Environmental Eng.  
6620 Owens Drive, Suite A  
Pleasanton CA., 94588

Project:N/A  
Project Number:2463-Solano Wy, Concord  
Project Manager:Tony Perini

S509179  
**Reported:**  
09/27/05 13:36

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Effluent	S509179-01	Water	09/09/05 11:00	09/09/05 11:45
Influent	S509179-02	Water	09/09/05 11:05	09/09/05 11:45



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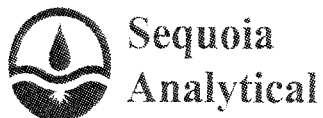
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Project: N/A  
Project Number: 2463-Solano Wy, Concord  
Project Manager: Tony Perini

S509179  
Reported:  
09/27/05 13:36

**Purgeable Hydrocarbons by EPA 8015B**  
**Sequoia Analytical - Sacramento**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Effluent (S509179-01) Water    Sampled: 09/09/05 11:00    Received: 09/09/05 11:45</b>									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	5090155	09/13/05	09/13/05	EPA 8015B- VOA	
Surrogate: 4-BFB (FID)		70 %	60-140		"	"	"	"	
Surrogate: a,a,a-TFT (PID)		81 %	60-140		"	"	"	"	
<b>Influent (S509179-02) Water    Sampled: 09/09/05 11:05    Received: 09/09/05 11:45</b>									
Gasoline Range Organics (C4-C12)	16000	2500	ug/l	50	5090155	09/13/05	09/13/05	EPA 8015B- VOA	
Surrogate: 4-BFB (FID)		96 %	60-140		"	"	"	"	
Surrogate: a,a,a-TFT (PID)		85 %	60-140		"	"	"	"	



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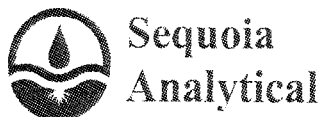
Soma Environmental Eng.  
6620 Owens Drive, Suite A  
Pleasanton CA., 94588

Project:N/A  
Project Number:2463-Solano Wy, Concord  
Project Manager:Tony Perini

S509179  
**Reported:**  
09/27/05 13:36

**Extractable Hydrocarbons by EPA 8015B**  
**Sequoia Analytical - Sacramento**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Effluent (S509179-01) Water    Sampled: 09/09/05 11:00    Received: 09/09/05 11:45</b>									
Diesel Range Organics (C10-C28)	ND	50	ug/l	1	5090131	09/12/05	09/12/05	EPA 8015B-SVOA	
<i>Surrogate: Octacosane</i>		58 %	50-150		"	"	"	"	
<b>Influent (S509179-02) Water    Sampled: 09/09/05 11:05    Received: 09/09/05 11:45</b>									
Diesel Range Organics (C10-C28)	4000	100	ug/l	2	5090131	09/12/05	09/13/05	EPA 8015B-SVOA	
<i>Surrogate: Octacosane</i>		102 %	50-150		"	"	"	"	



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Project:N/A  
Project Number:2463-Solano Wy, Concord  
Project Manager:Tony Perini

S509179  
Reported:  
09/27/05 13:36

**MTBE by EPA 8021B**  
**Sequoia Analytical - Sacramento**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Effluent (S509179-01) Water</b> <b>Sampled: 09/09/05 11:00</b> <b>Received: 09/09/05 11:45</b>									
Methyl tert-butyl ether	ND	2.0	ug/l	1	5090155	09/13/05	09/13/05	EPA 8021B	
Surrogate: a.a.a-TFT (PID)		81 %	60-140		"	"	"	"	
<b>Influent (S509179-02) Water</b> <b>Sampled: 09/09/05 11:05</b> <b>Received: 09/09/05 11:45</b>									
Methyl tert-butyl ether	370	100	ug/l	50	5090155	09/13/05	09/13/05	EPA 8021B	
Surrogate: a.a.a-TFT (PID)		85 %	60-140		"	"	"	"	



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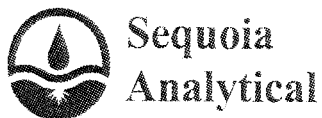
Project: N/A  
Project Number: 2463-Solano Wy, Concord  
Project Manager: Tony Perini

S509179  
Reported:  
09/27/05 13:36

**Purgeable Aromatics by EPA Method 602**  
**Sequoia Analytical - Sacramento**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Effluent (S509179-01) Water</b> Sampled: 09/09/05 11:00    Received: 09/09/05 11:45									
Benzene	ND	0.50	ug/l	1	5090155	09/13/05	09/13/05	EPA 602	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Surrogate: <i>a,a,a-TFT (PID)</i>		81 %	60-140		"	"	"	"	
<b>Influent (S509179-02) Water</b> Sampled: 09/09/05 11:05    Received: 09/09/05 11:45									
Benzene	350	25	ug/l	50	5090155	09/13/05	09/13/05	EPA 602	
Toluene	800	25	"	"	"	"	"	"	
Ethylbenzene	310	25	"	"	"	"	"	"	
Xylenes (total)	2100	25	"	"	"	"	"	"	
Surrogate: <i>a,a,a-TFT (PID)</i>		85 %	60-140		"	"	"	"	





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Project: N/A  
Project Number: 2463-Solano Wy, Concord  
Project Manager: Tony Perini

S509179  
Reported:  
09/27/05 13:36

**Purgeable Hydrocarbons by EPA 8015B - Quality Control**  
**Sequoia Analytical - Sacramento**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 5090155 - EPA 5030B (P/T) / EPA 8015B-VOA**

**Blank (5090155-BLK1)**

Prepared & Analyzed: 09/13/05

Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Surrogate: 4-BFB (FID)	7.13		"	10.0		71	60-140			
Surrogate: a,a,a-TFT (PID)	8.47		"	10.0		85	60-140			

**Laboratory Control Sample (5090155-BS1)**

Prepared & Analyzed: 09/13/05

Gasoline Range Organics (C4-C12)	80.8	50	ug/l				70-130			
Surrogate: 4-BFB (FID)	7.63		"	10.0		76	60-140			
Surrogate: a,a,a-TFT (PID)	8.24		"	10.0		82	60-140			

**Matrix Spike (5090155-MS1)**

Source: S509179-01

Prepared & Analyzed: 09/13/05

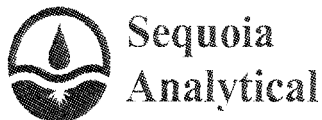
Gasoline Range Organics (C4-C12)	78.4	50	ug/l		ND		60-140			
Surrogate: 4-BFB (FID)	6.92		"	10.0		69	60-140			
Surrogate: a,a,a-TFT (PID)	7.96		"	10.0		80	60-140			

**Matrix Spike Dup (5090155-MSD1)**

Source: S509179-01

Prepared & Analyzed: 09/13/05

Gasoline Range Organics (C4-C12)	83.2	50	ug/l		ND		60-140	6	25	
Surrogate: 4-BFB (FID)	6.92		"	10.0		69	60-140			
Surrogate: a,a,a-TFT (PID)	8.15		"	10.0		82	60-140			



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Project: N/A  
Project Number: 2463-Solano Wy, Concord  
Project Manager: Tony Perini

S509179  
Reported:  
09/27/05 13:36

**Extractable Hydrocarbons by EPA 8015B - Quality Control**  
**Sequoia Analytical - Sacramento**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 5090131 - EPA 3510C / EPA 8015B-SVOA**

**Blank (5090131-BLK1)**

Prepared & Analyzed: 09/12/05

Diesel Range Organics (C10-C28)	ND	50	ug/l							
Surrogate: Octacosane	25.7		"	20.0		128	50-150			

**Laboratory Control Sample (5090131-BS1)**

Prepared & Analyzed: 09/12/05

Diesel Range Organics (C10-C28)	436	50	ug/l	500		87	60-140			
Surrogate: Octacosane	13.0		"	20.0		65	50-150			

**Laboratory Control Sample Dup (5090131-BSD1)**

Prepared & Analyzed: 09/12/05

Diesel Range Organics (C10-C28)	419	50	ug/l	500		84	60-140	4	50	
Surrogate: Octacosane	12.9		"	20.0		64	50-150			



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Project: N/A  
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Project Manager: Tony Perini

S509179  
Reported:  
09/27/05 13:36

**MTBE by EPA 8021B - Quality Control**  
**Sequoia Analytical - Sacramento**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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**Batch 5090155 - EPA 5030B (P/T) / EPA 8021B**

**Blank (5090155-BLK1)**

Prepared & Analyzed: 09/13/05

Methyl tert-butyl ether	ND	2.0	ug/l						
Surrogate: a,a,a-TFT (PID)	8.47		"	10.0		85	60-140		

**Laboratory Control Sample (5090155-BS1)**

Prepared & Analyzed: 09/13/05

Methyl tert-butyl ether	7.99	2.0	ug/l	10.0		80	70-130		
Surrogate: a,a,a-TFT (PID)	8.24		"	10.0		82	60-140		

**Matrix Spike (5090155-MS1)**

Source: S509179-01

Prepared & Analyzed: 09/13/05

Methyl tert-butyl ether	8.39	2.0	ug/l	10.0	ND	84	60-140		
Surrogate: a,a,a-TFT (PID)	7.96		"	10.0		80	60-140		

**Matrix Spike Dup (5090155-MSD1)**

Source: S509179-01

Prepared & Analyzed: 09/13/05

Methyl tert-butyl ether	8.77	2.0	ug/l	10.0	ND	88	60-140	4	25
Surrogate: a,a,a-TFT (PID)	8.15		"	10.0		82	60-140		



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Project: N/A  
Project Number: 2463-Solano Wy, Concord  
Project Manager: Tony Perini

S509179  
Reported:  
09/27/05 13:36

**Purgeable Aromatics by EPA Method 602 - Quality Control**  
**Sequoia Analytical - Sacramento**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	----------------	-----	--------------	-------

**Batch 5090155 - EPA 5030B (P/T) / EPA 602**

**Blank (5090155-BLK1)**

Prepared & Analyzed: 09/13/05

Benzene	ND	0.50	ug/l						
Toluene	ND	0.50	"						
Ethylbenzene	ND	0.50	"						
Xylenes (total)	ND	0.50	"						
Surrogate: a,a,a-TFT (PID)	8.47		"	10.0		85	60-140		

**Laboratory Control Sample (5090155-BS1)**

Prepared & Analyzed: 09/13/05

Benzene	8.04	0.50	ug/l	10.0		80	70-130		
Toluene	7.83	0.50	"	10.0		78	70-130		
Ethylbenzene	7.91	0.50	"	10.0		79	70-130		
Xylenes (total)	23.3	0.50	"	30.0		78	70-130		
Surrogate: a,a,a-TFT (PID)	8.24		"	10.0		82	60-140		

**Matrix Spike (5090155-MS1)**

Source: S509179-01

Prepared & Analyzed: 09/13/05

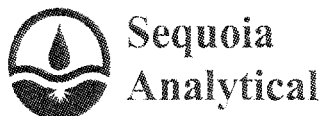
Benzene	8.10	0.50	ug/l	10.0	ND	81	60-140		
Toluene	7.84	0.50	"	10.0	ND	78	60-140		
Ethylbenzene	7.91	0.50	"	10.0	ND	79	60-140		
Xylenes (total)	23.3	0.50	"	30.0	ND	78	60-140		
Surrogate: a,a,a-TFT (PID)	7.96		"	10.0		80	60-140		

**Matrix Spike Dup (5090155-MSD1)**

Source: S509179-01

Prepared & Analyzed: 09/13/05

Benzene	8.19	0.50	ug/l	10.0	ND	82	60-140	1	25
Toluene	7.97	0.50	"	10.0	ND	80	60-140	2	25
Ethylbenzene	8.05	0.50	"	10.0	ND	80	60-140	2	25
Xylenes (total)	23.7	0.50	"	30.0	ND	79	60-140	2	25
Surrogate: a,a,a-TFT (PID)	8.15		"	10.0		82	60-140		



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Project: N/A  
Project Number: 2463-Solano Wy, Concord  
Project Manager: Tony Perini

S509179  
**Reported:**  
09/27/05 13:36

#### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference

# **Appendix D**

## **Operation & Maintenance Logs for the Groundwater Remediation System**

# CCCSD SOURCE CONTROL FLOW SUMMARY REPORT

**DISCHARGER:** As a condition of your permit, you are required to complete and submit this Flow Summary Report to the District on a periodic basis. Please refer to Reporting Requirements in the Appendix of your permit.

**DISCHARGER NAME:** Shimoff & LAGER, c/o Bert Harris station **PERMIT #** NA  
**DISCHARGE SITE:** 2185 Solano north **CITY** CONCORD

**REPORT PERIOD:** ☐ Jun 1 - Aug 31 ☒ Sep 1 - Nov 30 ☐ Dec 1 - Feb 28 ☐ Mar 1 - May 31  
**CHECK ONE** **YEAR**  
2005

	Month: <u>September 2005</u>	Month: <u>October 2005</u>	Month: <u>November 2005</u>
Total Flow Volume	<u>68,481</u> GALLONS	<u>11,255</u> GALLONS	<u>13,704</u> GALLONS
Average Daily Flow Volume	<u>2,446</u> GPD	<u>417</u> GPD	<u>508</u> GPD
Number of days of Discharge	<u>28</u> Days	<u>27</u> Days	<u>27</u> Days
Peak Daily Flow	GALLONS ON	GALLONS ON	GALLONS ON

*Notes: (8/31/05 - 9/28/05) (9/28/05 - 10/25/05) (10/25/05 - 11/21/05)*

1. Use readings from flow meter, flow logs, or water usage records. Attach copies of logs or records to this report.
2. Calculate Average Daily Flow Volume in gallons for each month. If available, record date and volume of peak daily flow in lieu of calculated average.

(For District use only)

☐ Bill Permit Fee \$ \_\_\_\_\_ Permit Type \_\_\_\_\_

Type of SSC billing:

- ☐ Industrial formula  
☐ Commercial rate  
 Commercial Category: \_\_\_\_\_

Type of Facility Use Charge billing:

- ☐ Flat rate \_\_\_\_\_ per \_\_\_\_\_  
☐ Groundwater formula (strength factors = 0)  
☐ FCF formula (strength factors provided)

Other Amount \_\_\_\_\_ For \_\_\_\_\_  
 Date Received \_\_\_\_\_ Date Processed \_\_\_\_\_ By \_\_\_\_\_

2185 Solano Way, Concord  
Secondary Carbon System

O&M Checklist      8,31,05      9,9,05      Date 9,13,05      9,20,05

Record Totalizer Reading	104,320	112,830	140,228	161,300
Record Instantaneous Flow Reading	3 GPM	4 GPM	4 GPM	3 GPM
Check Electrical downhole pumps	✓	✓	✓	✓
check for water leaks in system	✓	✓	✓	✓
check tightness of sensors in holding tank	✓	✓	✓	✓
check cleanliness of sensors in holding tank	✓	✓	✓	✓
LEL Reading	2	3	2	2
notes	11:30 AM Carbon Change Succeeded 2000lb Vessel 2 Drums replaced EFFLUENT line (PVC pipe) changed by Cameron			
	F B' 308 AM There is a leak in GAC Drum Fitting on Top of GAC unit changed GAC Drum changed			
	3:10 PM			

Add 850,274 gallons for flow to CCD  
 Add 1179,294 gallons for total system flow



2185 Solano Way, Concord  
Carbon Systems

10/19/05

10/14/05

Date

10/4/05

9/28/05

O&M Checklist	10/4/05	10/14/05	10/19/05
Gallons Record Totalizer Reading	175,350	179,050	181,117
(gallons) Record Instantaneous Flow Reading	2 GPM	2 GPM	268.7
Check Electrical downhole pumps	✓	✓	✓
check for water leaks in system	✓	✓	✓
check tightness of sensors in holding tank	✓	✓	✓
check cleanliness of sensors in holding tank	✓	✓	✓
LEL Reading	0	0	2
notes	1:50 PM	8:50 AM	11:30 AM
	Elect Bracket	Put 5.0MA contact info	
	For Trans Panel	on Carbon Tank	
	13 broken		

Add 850,274  
gallons for flow  
to CCCSD  
Add 1179294  
gallons for total  
system flow

2185 Solano Way, Concord  
Carbon System

11/17/05

11/10/05

Date

11/4/05

11/25/05

O&M Checklist

Gallons Record Totalizer Reading	184,056	138,388	191,19740	195,782
(gallons) Record Instantaneous Flow Reading	3 gpm		2 gpm	
Check Electrical downhole pumps	✓	✓	✓	✓
check for water leaks in system	✓	✓	✓	✓
check tightness of sensors in holding tank	✓	✓	✓	✓
check cleanliness of sensors in holding tank	✓	✓	✓	✓
LEL Reading	2		2	1
notes			3.05	12.45

• Add 850,274  
gallons to flow  
to CCCC  
• Add 1179294  
gallons to total  
system flow

2185 Solano Way, Concord  
Carbon Systems

Date

11/21/05

O&M Checklist

Record Totalizer Reading (gallons)	197760								
Record Instantaneous Flow Reading (gallons)									
Check Electrical downhole pumps	✓								
check for water leaks in system	✓								
check tightness of sensors in holding tank	✓								
check cleanliness of sensors in holding tank	✓								
LEL Reading	12.50								
notes	Strong aggs seen on ike								

Add 850,274 gallons for flow to CCCC  
Add 1179294 gallons for total system flow